

## Technical Characteristics Series BIOESSENZE

### ANSI/ASTM Standards

Products: **ROVERE DECAPE' – ROVERE NATURALE - ROVERE PEPE - LARICE CHIARO – WENGE' – NOCE - ROVERE BIANCO - TEAK**

Sizes/Thicknesses (mm): **RECTIFIED 5.9x49.2/12 (rovere pepe, larice chiaro, wengè, noce, rovere bianco)**

**RECTIFIED 7.9x49.2/12 (rovere decapè, rovere naturale)**

**RECTIFIED 3.5x35.4/9 (teak)**

Product group: **Porcelain Tiles - class P1** (Water absorption  $\leq 0,5$  %)

Surface: **GLAZED (GL)**

Technical characteristics	Test method	ANSI 137.1: Values required for Unglazed Porcelain Tiles Class P1	BIOESSENZE Values
Water absorption	ASTM C373	$\leq 0.5$ %	$\leq 0.05$ %
Breaking strength	ASTM C648	$\geq 250$ pounds	Compliant
Resistance to surface abrasion	ASTM C1027 (PEI method)	Not required	PEI 5 (rovere bianco, rovere decapè, larice chiaro, rovere naturale, noce)  PEI 4 (rovere pepe, teak, wengè)
Linear thermal expansion	ASTM C372	Not required	$\alpha \leq 8 \cdot 10^{-6} \text{ } ^\circ\text{C}^{-1}$ $\alpha \leq 4.4 \cdot 10^{-6} \text{ } ^\circ\text{F}^{-1}$
Thermal shock resistance	ASTM C484	No sample must show visible signs	Resistant
Chemical resistance	ASTM C650	Not required	Resistant
Stain resistance	CTI-T-81 D	Not required	Resistant
Frost resistance	ASTM C1026	Not required	Resistant
Bond strength	ASTM C482	$\geq 50$ PSI	Compliant
Dimensions	Warpage Edge	ASTM C485 $\pm 0.40$ % or max $\pm 0.05$ inch for tiles up to 24"x24" or max $\pm 0,07$ inch for tiles larger than 24"x24"	Compliant
	Warpage Diagonal	ASTM C485 $\pm 0.40$ % or max $\pm 0.07$ inch	Compliant
	Nominal sizes	ASTM C499 -3.0% / +2,0% of nominal dimensions	$\pm 1.50$ %
	Caliber range	ASTM C499 $\pm 0.25$ % or max $\pm 0.03$ inch	Compliant
	Thickness	ASTM C499 $\leq 0.040$ inch	$\leq 0.030$ inch
	Wedging	ASTM C502 $\pm 0.25$ % or max $\pm 0.03$ inch	Compliant
Slip resistance	ASTM C1028	COF $< 0.50$ questionable $0.50 \leq \text{COF} < 0.60$ conditionally slip resistant COF $\geq 0.60$ slip resistant	dry-neolite: COF $\geq 0.60$ wet-neolite: COF $\geq 0.60$ (rovere bianco, rovere pepe, rovere decapè, wengè)